ABSTRACT

The "Positive Displacement Turbine" engine (PDT) presented herein conforms to the classical definition of a heat engine. It operates in a thermodynamic cycle approximating the Otto, Diesel and Muller cycles but the primary motive force is developed at the pressure face of a blade rather than at the head of a reciprocating piston. The machine is therefore truly rotary with turbine-like characteristics, nevertheless, a fixed mass of air and fuel is compressed, ignited and expanded in a truly positive displacement process.

Improvements offered by the present invention arise from the novel application of compression and expansion cycles being executed in adjacent and isolated chambers dynamically linked via internally mounted rotating combustion chambers hither too unseen as prior art. The means provided by this unique aspect of the present invention place it into a class of prime mover all of its own.